



## Sustainable Santa Barbara 2007 Annual Report



**Sustainable**  
**Santa**  
**Barbara**

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**S**CIENTISTS AROUND THE WORLD ARE CALLING OUR ATTENTION TO CLIMATE CHANGE. Burning fossil fuels such as coal, oil, and gas to run cars, buildings and power plants is leading to a rise in greenhouse gases. These gases have contributed to an increase in the average temperature of the Earth's atmosphere and oceans, known as global warming.

Many environmental changes are occurring around us. Rising temperatures are leading to more hurricanes, more intense heat waves, and a drier climate that contributes to wildfires. Ocean waters are warming and glaciers and ice sheets are melting. The scientific community has predicted a sea level rise that would threaten coastal communities around the world.

### **Protecting our climate is a top priority for the City of Santa Barbara.**

As part of a global effort, we are taking action now by using smarter energy technologies that increase efficiency and rely on clean renewable energy sources. Starting with a base year of 2005, we are tracking our greenhouse gas emissions and learning how to reduce them.

Our City has developed many successful programs to help us become environmental leaders. For example, we are recycling far more waste than we throw away. We are pioneering new methods to clean our creek and ocean water. Our City will build on these successes to meet the challenges ahead.

We are proud to have reached and exceeded many of our environmental performance goals this year. The 2007 Annual Report highlights our City's best practices, recent achievements, and future plans.

We need everyone's help to take action and make a difference. Together we can take steps that conserve energy, prevent waste, and protect our natural resources for our future in Santa Barbara and for the planet.

A handwritten signature in cursive script that reads "Marty Blum".

Mayor Marty Blum

**T**HE CULTURE OF OUR ORGANIZATION IS CHANGING - OUR EMPLOYEES, OUR BUILDINGS, AND OUR VALUES.

We have integrated environmentally sustainable goals in the management and operation of all City departments. Through training, communication efforts and annual performance goals, we've seen the City's organizational culture begin to transform. Our aim is to provide services to the community and conduct daily business in a sustainable manner. We are generating less waste, using less fossil-fuel energy, and protecting our natural resources.

We are giving our employees the tools they need to identify and strengthen existing sustainability practices in their operation. The City's Green Team developed and provided an informative and engaging session for employees in all City departments on *How to Be Green at Home and Work*. Four hundred

employees learned how they can save energy, prevent waste, conserve water, and explore alternatives to driving their cars. Our employees understand that there is no program too small to make a difference. Each of us can make a contribution in becoming a more sustainable community.

We are proud of our employees for their efforts to serve the public, while promoting our culture and values of sustainability and respect for the environment.

As we move into the future, we encourage you to find ways you can make a difference at home and work. Our community has built the infrastructure for sustainable practices and we've made it easy for our community to be "green." To learn more about the City's sustainable activities and get ideas to become more sustainable, visit the City's web site at [www.SantaBarbaraCA.gov](http://www.SantaBarbaraCA.gov).







Waste Prevention



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# Waste Prevention

## YOU CAN MAKE A DIFFERENCE

- Avoid buying products with excess packaging
- Maintain and repair durable products
- Reuse bags, containers, and other items
- Borrow, rent, or share items used infrequently
- Sell or donate goods instead of throwing them away

### What is it?

Waste prevention is simply not producing waste, where no material needs to be put in the trash or recycling container, and no pollution is generated. Preventing waste is different than recycling in that it avoids the use or manufacture of materials altogether.

### Why is this important?

Waste prevention is much less expensive, less polluting, and saves far more nonrenewable resources than recycling or reusing. In using less material, fewer waste products are handled, saving money and energy.

### How do we measure our progress?

Waste prevention is principally measured through the diversion of waste from landfills. By closely tracking how much and where waste is being produced annually, the City can accurately measure reductions in the generation of waste.

### City's Best Practices

City operations have continued to transition to email correspondence and electronic recordkeeping instead of using paper-based communication and tracking systems. The employee newsletter and various City reports are distributed to employees and the public via email and the Internet.

Upon hire, each employee receives a reusable mug to prevent the waste of daily coffee and beverage cups. Reusable canvas bags are given to employees to help employees carry groceries and store purchases. Surplus computer systems are donated to community families to promote reuse of equipment. Green waste is reused as mulch in City parks and landscaping.

City libraries promote the reuse of books and audiovisual resources to prevent waste. The libraries have been encouraging patrons to download audio books as an alternative to hard copy books.

### RECENT ACHIEVEMENTS

Duplex printers are widespread in many facilities to help reduce paper waste through double-sided printing. Employees recently were provided with an option to stop receiving bimonthly payroll advice statements and use an electronic system to prevent paper waste. Also, a Freecycle Program was implemented for City employees to help them exchange surplus office supplies and furniture.

### NEXT STEPS

- Implement an electronic payment service for utility bills to save paper bills.
- Implement an electronic timesheet system for employees to track work time saving paper generation each week.
- Expand Zero Waste Initiative to include commercial composting for large events.
- Implement a green purchasing policy to promote the use of products made of recycled, reused, or compostable materials, and toxic-free materials, use less packaging, and focus equipment purchases on waste prevention.

# Recycling

### What is it?

Recycling is the collection and reprocessing of waste materials into new products. Materials can be recycled within several major categories, including paper, plastic, glass, metal, food waste, and green waste.

### Why is this important?

Recycling prevents useful resources from being wasted and reduces the consumption of raw materials and the energy needed to process them. Recycling also prevents many resources from reaching a landfill.

### How do we measure our progress?

The City measures its success on the decline of waste disposed by the community at the Tajiguas landfill and the increase in materials diverted.

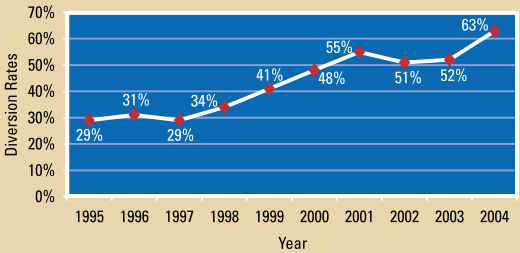
### City's Best Practices

All City employee workstations have a three to ten gallon recycling container and a small one gallon trash container to encourage recycling efforts. "Reduce, Reuse, Recycle" signage is displayed on bins and waste prevention information to help employees understand how to prevent waste. Trash and recycling containers have been installed in common areas of City buildings. The use of recycled materials is encouraged in many supplies. Thirty percent or higher recycled content paper is used for printing needs.

### NEXT STEPS

- Develop and implement a mandatory commercial recycling ordinance.
- Implement a pilot foodscrap composting program.
- Develop and administer a construction and demolition recycling ordinance.
- Implement automated tracking of waste and recycling in different City facilities with the installation of a new utility billing system.
- Develop and provide recycling-specific training for City employees.

City of Santa Barbara  
Citywide Diversion Rates



Construction and demolition debris are recycled from City projects. Recycled asphalt is used in the construction of streets and sidewalks. Playground materials in several parks are constructed with recycled wood and rubber.

### RECENT ACHIEVEMENTS

The City conducts all events where food is served as "zero waste events," including utensils and plates that are compostable or recyclable. All City facilities host special containers for comingled recycling, compostable materials, batteries, and electronic waste. Worm composting bins are in place in several facilities, allowing foodscrap recycling.

## YOU CAN MAKE A DIFFERENCE

- Recycle materials such as paper, cardboard, glass, newspaper, cans, and most plastic products
- Purchase products made from recycled content and items that can be recycled or composted
- Compost yard trimmings and foodscrap
- Learn about items that can be recycled at: [www.SBrecycles.org](http://www.SBrecycles.org)



What is it?

A hazardous material is any solid, liquid, or gas that can harm people, other living organisms, property, or the environment. A hazardous material may be radioactive, flammable, explosive, toxic, corrosive, biohazardous, an oxidizer, an asphyxiant, an allergen, or may have other characteristics that make it hazardous in specific circumstances.

YOU CAN MAKE A DIFFERENCE

- Do not recycle or throw away batteries, electronic devices, fluorescent bulbs, cell phones, aerosol cans, or mercury-containing devices such as thermometers and electric switches
- Dispose of batteries, electronic devices, CDs, fluorescent bulbs, anti-freeze, oil, and paint at the ABOP Facility at 132 Nopalitos Way
- Visit SBrecycles.org for more information on disposal of hazardous materials

Why is this important?

Hazardous materials in various forms can cause death, serious injury, long-lasting health effects, and damage to buildings, homes, other property, and the environment.

How do we measure our progress?

For the disposal of any amount of hazardous or household hazardous wastes, it is mandatory to create a Hazardous Waste Manifest that tracks the waste from cradle to grave. The manifests are submitted to the Department of Toxic Substance Control Board (DTSC).

City's Best Practices

Marborg Industries now operates the City ABOP (Antifreeze, Batteries, Oil, and Paint) facility six days per week, offering increased convenience for residents to safely dispose of hazardous materials. Several Leaking



Underground Fuel Tanks (LUFTs) have been removed from city-owned properties.

RECENT ACHIEVEMENTS

The City has transitioned to Green Seal certified cleaning supplies in most facilities. These products have been effective in cleaning work areas with no significant negative impacts for custodial staff.

The City's Harbor received a California Clean Marina certification for activities to improve water quality, enforce no-discharge rules, and reduce toxic materials from boating equipment and supplies. The City is one of the first public marinas in California to receive this certification.

NEXT STEPS

- Develop standards for Green Cleaning Supplies for all City facilities, including the Airport and Waterfront.
- Identify non-toxic alternatives to hazardous materials as part of the development of a Green Purchasing Policy.
- Expand the materials acceptable at the City's ABOP facility to include all household hazardous wastes.
- Replace underground storage tanks with above-ground fuel tanks at all City fueling sites, including the Golf Course and Airport.

What are they?

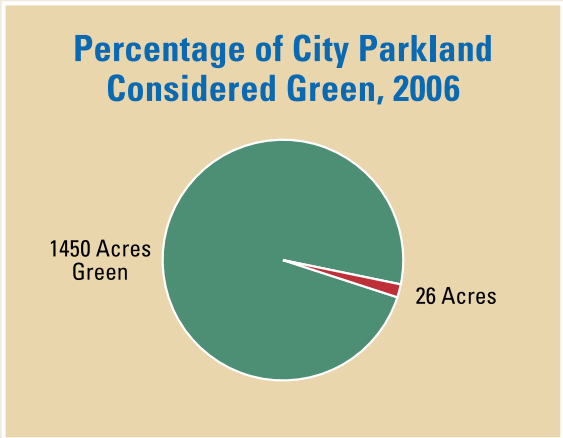
Green parks are active and passive parklands where no harmful pesticides are used to control weeds or eliminate pests.

Why are they important?

Besides human health risks, pesticides may pose dangers to the environment.

How do we measure our progress?

The City measures its progress in the percentage of parkland considered "Green" or "Yellow" using the Pesticide Hazard And Exposure Reduction (PHAER) Zone Model. Low hazard pesticides and methods are used to control pests and weeds in "Green" parklands. Moderate hazard pesticides are used to control pests and weeds in "Yellow" parklands.



NEXT STEPS

- Ensure that 90% of parks maintenance staff have a Green Gardener certification and 75% of parks maintenance staff are certified as Advanced Green Gardeners.
- Maintain 98% of City parkland acreage as "Green" parkland.
- Convert San Roque Park and the Chase Palm Park Garden Street Parking Lot to "Green" zones.
- Install sustainable landscape projects at Chase Palm Park, San Roque Park and the Main Library.

City's Best Practices

The City has successfully implemented an Integrated Pest Management Program to maintain City parks. The City uses propane weed flamers, steam weed killer, compost, slow-release fertilizers, recycler mowers, mulch, and other sustainable methods and materials to eliminate weeds and pests from City parks and landscaped areas.

RECENT ACHIEVEMENTS

The City Council adopted the Pesticide Hazard And Exposure Reduction (PHAER) Zone model that designates entire sites or portions of park sites as "Green" or "Yellow", based on the potential for exposure by humans and sensitive habitat to hazardous pesticides.

The City has converted 98% of City parkland to "Green" status. The City's award-winning A.C. Postel Memorial Rose Garden is maintained without the use of Round-Up pesticide to control weeds. City parks have reduced pesticide use by approximately 90% over the past five years.

The City also produces the *Garden Wise Guys* TV show that helps the community learn green gardening principles for their home gardens.

YOU CAN MAKE A DIFFERENCE

- Mulch garden to control weeds
- Use weed fabric to control weeds
- Use worm castings to control insects
- Hose off plant material with water to remove unwanted insects





## Water Quality, Conservation and Habitat Restoration





What is it?

Water conservation is the efficient use of water resources.

Why is this important?

It is important to save water because we live in a semi-arid climate and rainfall is not always plentiful. The City's water supply is diverse but we rely on rainfall to fill our main water supplies, which are Lake Cachuma and the Gibraltar Reservoir. By conserving water, we extend the amount of water we have for times when rainfall is minimal.

YOU CAN MAKE A DIFFERENCE

- Use the landscape watering calculator and watering index
- Repair leaks immediately
- Use water-wise plants
- Buy a high efficiency clothes washer
- To learn more ways to save water, visit: [SantaBarbaraCA.gov/water](http://SantaBarbaraCA.gov/water)

How do we measure our progress?

The City measures its success by tracking annual potable water use in City facilities.

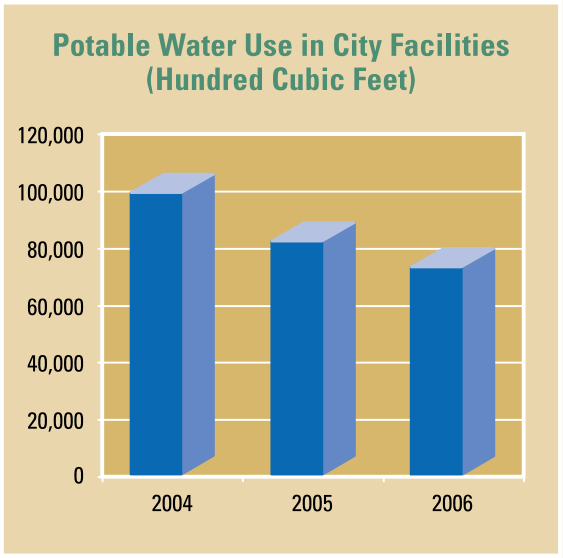
City's Best Practices

City facilities are equipped with the latest in water-saving devices, including waterless urinals, low-flow toilets, and showerheads. Many City facilities and parks are landscaped with water-wise plants. City facility and parks irrigation systems

continue to upgrade with smart irrigation controllers, rain sensors and state-of-the-art irrigation equipment.

NEXT STEPS

- Complete a comprehensive audit of water use at City facilities and develop recommendations to conserve water.
- Continue installation of waterless urinals in City facilities.
- Maintain water use within the landscape water budget for all City irrigation meters.
- Install a rain sensor and/or smart irrigation technology for all City facility irrigation controllers.
- Install additional water-wise landscaping at City facilities.
- Establish guidelines for all new City facilities to use progressive water conservation plumbing fixtures, state-of-the-art irrigation equipment, and water-wise landscaping.



RECENT ACHIEVEMENTS

The City continues to install waterless urinals in City facilities with eight more installed this year for a total of 22 in City facilities. At one City facility retrofitted two years ago with four waterless urinals, the water use has decreased by 45%. Additionally, water-wise landscaping has been installed at the Central Library. For irrigation efficiency, staff is working with all Divisions with irrigation meters to participate in the California Landscape Budgets Program.

What is it?

Recycled water is highly treated wastewater used for irrigating landscapes, toilet flushing, and other uses where potable quality water is not necessary.

Why is this important?

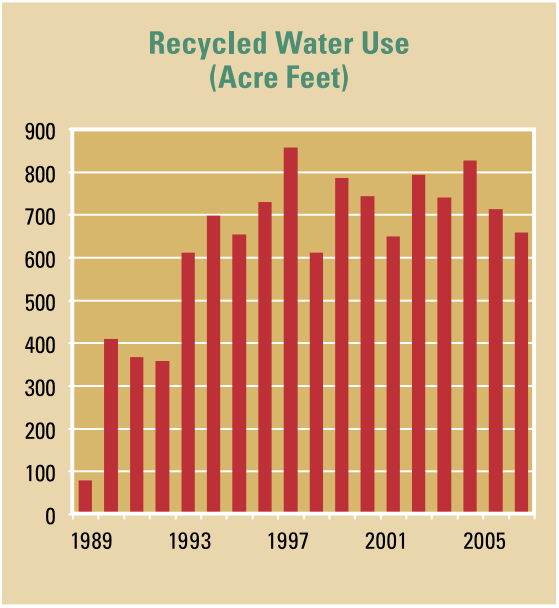
Increasing the use of recycled water reduces the demand for potable water.

How do we measure our progress?

The City measures its success by the long-term trend in recycled water use over time.

City's Best Practices

All City parks adjacent to the recycled water distribution system use recycled water for irrigating landscaping. Currently, the City has twenty-four parks and City facilities irrigated



NEXT STEPS

- Complete a Recycled Water Expansion Study to evaluate the feasibility of adding new users.
- Convert one additional City public restroom to recycled water for toilet flushing.
- Promote additional legal uses of recycled water.
- Investigate options for improving recycled water quality through reduction of dissolved solids.

with recycled water, one ornamental fountain with recycled water and eight public restrooms are plumbed with recycled water for toilet flushing.

RECENT ACHIEVEMENTS

The City continues to add new development to the recycled water distribution system and encourage additional legal uses in addition to irrigation. Restrooms at Leadbetter Beach now use recycled water for toilet flushing. New use of recycled water is being planned for a major development near Garden Street and Yanonali Street.

YOU CAN MAKE A DIFFERENCE

- Use potassium chloride in your water softener (instead of regular salt) to reduce salt levels in the City's recycled water
- Use an "on demand" water softener instead of one that uses a timer; fewer cycles means less waste.



What is it?

Creek and ocean water quality depend on healthy watersheds. A watershed is land that is drained by a creek system that flows to the ocean. Healthy creek systems contribute to improved coastal ocean water quality.

Why is this important?

Urban runoff flowing into creeks contains pollutants such as fecal indicator bacteria, oil, pet waste, trash, soap, fertilizers, and landscape waste that are carried out to the ocean. Reducing storm water pollution and restoring creeks improves the water quality of our creeks and ocean, resulting in a healthier environment for humans, plants, and animals.



NEXT STEPS

- Complete the final design and secure funding for the Las Positas/Golf Club storm water detention system.
- Develop and test a tool kit for load tracking in storm drains and creeks.
- Assess the feasibility of a water treatment facility for the Laguna Pump Station.

How do we measure our progress?

Progress is measured through weekly creek and ocean monitoring, storm monitoring, DNA microbial source tracking, annual bio-assessments, and monitoring the performance of water quality and wetland restoration projects.

City's Best Practices

Since 2004 the City has been working with UCSB to develop DNA microbial source tracking methods to determine the presence and source of human waste in creeks and storm drains. This represents a unique relationship and cutting edge approach to identifying human health risks and improving water quality.

Efforts to prevent water pollution are implemented on a daily basis with creek clean-ups, storm drain filters, enforcement of city pollution prevention laws, youth education and media outreach campaigns, and business technical outreach programs.

RECENT ACHIEVEMENTS

The City recently completed three major water treatment projects, including two projects that divert polluted storm drain water to the sanitary sewer from the Hope Avenue and the Haley Street Storm Drains. A third project, the Westside Summer Urban Runoff facility will treat dry weather urban runoff from a 632 acre watershed.

What is it?

Habitat restoration involves the removal of non-native and invasive plants and replanting with native grasses, trees and shrubs, as well as the enhancement of wetland and creek systems and other natural areas. Habitat restoration improves native plant and wildlife diversity and aquatic environments.

Why is this important?

Many native plant and wetland communities including oak woodlands, riparian areas, salt marsh and coastal scrub have been lost due to urban development and agriculture. Invasive, non-native plants reduce wildlife diversity and create fire hazards. The filling of creeks and wetlands degrades aquatic environments and reduces the filtering capacity of creeks.

How do we measure our progress?

The City measures the number of native wetland plants planted and the acres or linear feet of creek and wetlands restored or revegetated.

RECENT ACHIEVEMENTS

The City Airport property includes approximately 400 acres of the Goleta Slough. Several Airport capital projects have been designed to improve the quality of the Goleta Slough and its tributaries. Seventy-five acres of native habitat in the Goleta Slough area have been restored and maintained as part of the Safety Area Grading Project, the Airfield Safety Projects and other projects, representing the largest wetland restoration effort on the Santa



Barbara County South Coast. The Airport has also undertaken a two-year experiment to determine if restoration of tidal circulation and habitat is feasible in portions of the Goleta Slough now dominated by freshwater wetlands. The Airport operates a Native Plant Nursery to supply local native plants to the restoration efforts in the Goleta Slough.

The City recently completed the Mesa Creek and Arroyo Burro Estuary restoration project, which restored coastal estuarine, riparian and coastal sage scrub habitats, and contributes to improved water quality. With a plant pallet of over 6,000 native grasses, trees and shrubs, a significant feature of the project was daylighting Mesa Creek. Additional creekside projects planted over 2,000 native plants.

The City's Golf Club recently received a certification from the Audubon Cooperative Sanctuary System for the development of a nature preserve.

NEXT STEPS

- Initiate development of a watershed-based non-native, invasive plant removal program.
- Develop concept designs and submit a permit application for one restoration/fish passage project at Mission Creek.
- Complete a hydrologic model for providing steelhead fish passage in the Mission Tunnel.
- Complete the Tidal Circulation experiment at the Airport and report results to the California Coastal Commission.
- Design and implement approximately 8.8 acres of additional wetland mitigation associated with the Airfield Safety Projects.





**What is it?**

The City’s urban forest is a collection of trees that grow within the community.

**Why is this important?**

Protection of the City’s urban forest is important because the trees filter air, water, sunlight, and provide shelter to animals and recreational areas for people. Trees moderate local climate by consuming harmful emissions and releasing oxygen. The trees also shade homes and businesses to conserve energy.

**How do we measure our progress?**

The City’s protection of the urban forest is measured by maintaining or increasing the number of City park and street trees. There are approximately 35,550 trees in the City’s program.

**City’s Best Practices**

The City adheres to tree preservation ordinances that regulate the planting, pruning, and removal of City trees and residential front yard setback trees. The ordinances define how a City tree or a privately-owned tree can be given special protection by the designation “Historic” or “Specimen” tree.

**RECENT ACHIEVEMENTS**

The City of Santa Barbara was recently named Tree City USA for the 27th year by the National Arbor Day Foundation. Santa Barbara met the criteria with an active Street Tree Advisory Committee, a tree care ordinance, an Arbor Day observance, and a comprehensive forestry program.

**YOU CAN MAKE A DIFFERENCE**

- Plant a tree for greener beautiful neighborhoods, shade for cooling and energy savings, increased economic vitality, stronger neighborhoods with positive social ties

**NEXT STEPS**

- Complete a tree inventory to understand the types, conditions, and locations of all street and park trees.
- Maintain a tree replacement program by planting more trees than the average loss of trees on a 2:1 ratio.
- Achieve an average 5-year pruning cycle of all street trees.
- Achieve an average 6-year pruning cycle of all park and facility trees.

**What is it?**

Wastewater treatment is the treatment of sewage and other wastes from the City’s homes and businesses to remove harmful pollutants prior to returning the water to the environment.

**Why is this important?**

Clean water is the foundation of healthy ecosystems. Wastewater treatment allows protection of our ecosystems and environment. Wastewater treatment is also critical to preventing disease.

**How do we measure our progress?**

The City measures its progress in protecting water quality in a number of ways- by complying with the discharge permit issued for the wastewater treatment plant; and by counting the number of sewage spills.



**NEXT STEPS**

- Implement the Sewer Lateral Inspection Program to reduce sewer spills caused by private laterals.
- Install an equalization basin at El Estero to improve process control.
- Replace 30-year old influent pumps at El Estero to improve reliability.

**City’s Best Practices**

The City operates the El Estero Wastewater Treatment Plant to treat all wastewater prior to discharge to the environment. In addition, the City has a number of programs to reduce pollution such as street sweeping, dry-weather diversion of urban runoff, and maintenance of the wastewater collection system to prevent overflows.

**RECENT ACHIEVEMENTS**

The City installed 3,200 lineal feet of new sewer line to reduce the frequency of sewage spills during wet weather.

Without controlling inflow and infiltration from private property, the City’s ability to further reduce overflows was limited. A Sewer Lateral Inspection Program was adopted to ensure that sewer laterals are inspected when property owners are doing substantial work, whenever there is cause to believe that the lateral needs repair, and on a ten-year cycle for commercial properties and condominium complexes. Incentives are also proposed to encourage homeowners to proactively inspect and replace laterals.

**YOU CAN MAKE A DIFFERENCE**

- Don’t pour grease down the drain – it clogs pipes causing overflows
- Dispose of hazardous materials properly
- Disconnect out-door drains from the sewer
- Inspect your sewer lateral to make sure it’s not clogged or broken





Climate Protection



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What is it?

Renewable energy comes from resources that are regenerative or cannot be depleted. Examples of renewable energy sources include solar, wind, biogas, hydro-electric, and other sustainable sources.

Why is this important?

Increasing the City's use of renewable energy consumption helps reduce the use of non-renewable fossil fuels that contribute to pollution and global climate change.

How do we measure our progress?

The City measures its success by the amount of renewable energy used to power City facilities as a percentage of total energy consumed. Between 2004 and 2005, the City's use of renewable energy increased by 7%.

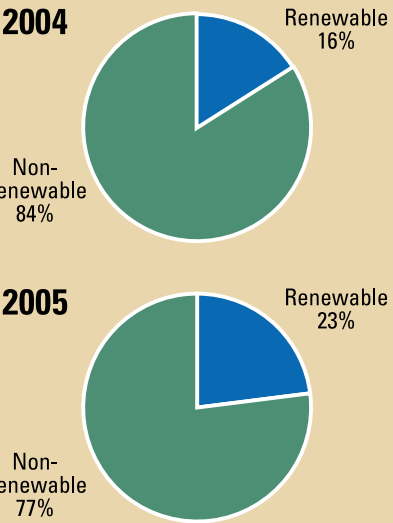
City's Best Practices

The recently completed fuel cell generator at the El Estero Wastewater Treatment Plant transforms methane gas to electrical energy on a daily basis. The fuel cell powers approximately 1/2 of the plant's needs with a 500 kW capacity. The El Estero fuel cell is the first commercially operated fuel cell in the state. The wastewater treatment plant's renewable energy system recently won the League of California Cities Helen Putnam Grand Prize Award.

NEXT STEPS

- Complete the construction of solar panels on Fire Station #2 to provide over half of the facility's electrical power needs.
- Initiate a project to install solar panels on City offices at Garden and Laguna Streets, estimated to provide 60% of the building's power needs.
- Initiate construction of solar panels on the Fire Department Administration building.
- Complete a feasibility study to reactivate a 750 kW hydro-electric energy plant to satisfy over 50% of the electricity demand of the Cater Water Treatment Plant.

Electrical Energy Sources for City Facilities



RECENT ACHIEVEMENTS

Solar Design Guidelines and Recognition Programs were adopted in December 2006. The Solar Energy System Design Guidelines encourage solar energy systems in the community that are high performing as well as aesthetically well integrated in the building design, and therefore eligible for a recognition award. The Passive Solar Guidelines encourage building siting, orientation, materials, construction techniques and landscaping to reduce long-term energy needs for new developments. The two documents are focused on education, voluntary use and an annual recognition program.

What is it?

Energy conservation is using less energy in the operation of facilities. We conserve energy through energy-efficient facilities, equipment, and devices and behavioral changes to use less energy.

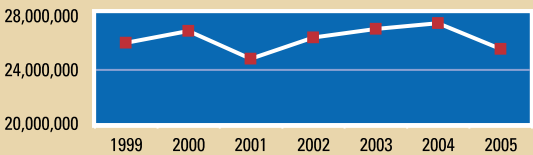
Why is this important?

Energy conservation is the most cost-effective method for the City to reduce electrical energy consumption that contributes to climate change.

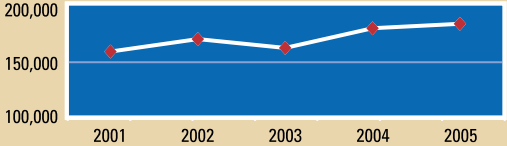
How do we measure our progress?

The City measures its success by reducing the amount of energy consumed, via electricity and natural gas.

Electricity Used in City Facilities (in kWh)



Natural Gas Used in City Facilities (in therms)



NEXT STEPS

- Develop an energy conservation plan and begin implementation of energy efficiency projects, based on energy audit results.
- Implement a systematic plan to retrofit existing fluorescent light fixtures to new, energy-efficient models.
- Install direct digital controls on heating and air conditioning systems.
- Institute a plan to maintain reflectivity of existing "cool roofs" that reduce electricity-consuming cooling loads in the summer.
- Train facility coordinators to understand each facility's energy use, help employees reduce personal consumption, and coordinate conservation projects.

City's Best Practices

The City's entire system of traffic signals operate on Light Emitting Diode (LED) lighting. All street lights are powered by sodium or metal halide lamps. Compact fluorescent and LED lighting is used throughout all City buildings. The Airport boasts pilot-controlled lighting that saves energy. Airfield lighting and transformers have also been replaced to improve energy efficiency. Many employees save energy with reduced lighting and the use of motion sensor lighting during work days.

RECENT ACHIEVEMENTS

The City recently implemented an Energy Use and Reduction Policy to help employees and facility maintenance staff conserve energy. The Policy provides guidelines and tips to employees for the use of lighting, computers, electrical devices, and heating and air conditioning. Guidelines include setting thermostats between 73 – 76 degrees, hibernation of computers during non-work hours, and restrictions on personal electrical devices. New electrical devices must be Energy Star or EPEAT certified. Energy audits have recently been performed on ten major City facilities.

YOU CAN MAKE A DIFFERENCE

- Use compact fluorescent light (CFL) bulbs instead of incandescent bulbs
- Turn off equipment and computers when not in use
- Learn about Energy Star certified devices at: [www.energystar.gov](http://www.energystar.gov)



# Alternative Fuels

### What are they?

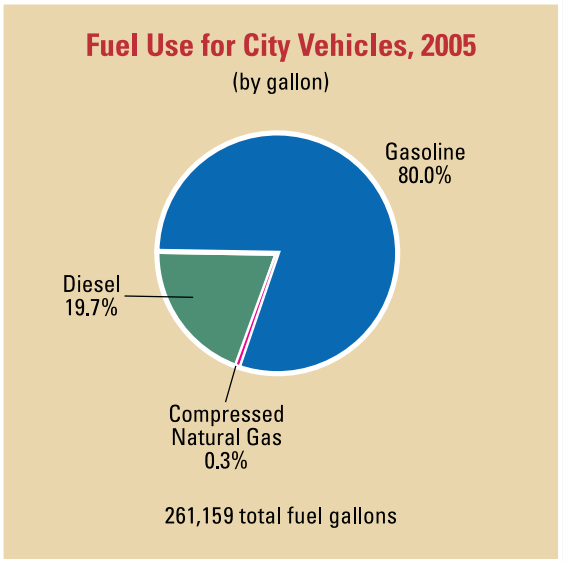
Alternative fuels are fuels that reduce harmful global warming pollution. Examples include ethanol, biodiesel, hydrogen, and solar power.

### Why are they important?

The increased use of alternative fuels helps reduce reliance on fossil fuels that contribute to global climate change.

### How do we measure our progress?

The City measures its success by the decline of non-sustainable fuel used to power vehicle fleet and facilities. The more we use alternative fuel or fuel technology, the less non-sustainable fuel we need.



### RECENT ACHIEVEMENTS

The City uses B20 ultra-low-sulfur biodiesel in all diesel vehicles, including fire engines and construction equipment. Thirteen emergency generators are also powered by biodiesel. After nine months, there have been no significant negative effects on the operation and maintenance of the fleet.

### City's Best Practices

Whenever available for the vehicle category, the City purchases alternative fuel or hybrid vehicles. The City's fleet currently includes 2 electric vehicles, 24 hybrid vehicles, 8 compressed natural gas (CNG) vehicles, 2 liquid petroleum vehicles, and 108 biodiesel vehicles. Electric vehicle recharging stations are available at designated City parking lots.

### YOU CAN MAKE A DIFFERENCE

- Consider purchasing biodiesel fuel for diesel powered vehicles
- Consider purchasing hybrid vehicles
- Consider fuel efficiency when purchasing a vehicle
- See the following website for fuel efficiency ratings and what you can do to improve fuel efficiency: [www.fueleconomy.gov/](http://www.fueleconomy.gov/)

### NEXT STEPS

- Complete a vehicle use policy to provide guidance to employees on the purchase of alternative fuel vehicles and carsharing practices.
- Develop an online vehicle reservation system to allow employees to share and better utilize vehicles and reduce the number of fleet vehicles.
- As city vehicles are replaced, purchase alternative fuel vehicles, if available, that meet department operational needs.
- Implement the use of alternative fuel vehicles for selected Police Department vehicles.
- Implement a preferred parking pilot program for alternative fuel vehicles at the City Hall parking lot to encourage employees to commute in alternative fuel vehicles.

# Green Building Practices

### What are they?

Green building practices increase building efficiency and reduce consumption of energy, water, and materials, reducing impacts on human health and the environment.

### Why are they important?

Buildings account for 48% of energy consumption and greenhouse gas emissions in the United States. Encouraging green building techniques can substantially decrease our community's impact on climate.

### How do we measure our progress?

The City measures its success by the number of buildings in the community that meet LEED (Leadership in Energy and Environmental Design) or Built Green Santa Barbara certification requirements or are processed under the Green Building Incentive Program.

### Green Building Projects Completed

February 2007

LEED Certified	0
Built Green Certified	12
Number Reviewed Under Green Building Incentives Program	2

### City's Best Practices

The Green Building Incentive Program provides expedited plan check for projects striving to meet LEED or Built Green Santa Barbara standards.

### RECENT ACHIEVEMENTS

A Green Building Policy for City Buildings was adopted to curb energy consumption in new construction, major renovations, and building retrofits. Under the new policy, new construction and major renovations to City-owned and operated buildings will be designed to exceed California Title 24 Energy Efficiency Standards by 20% and achieve LEED Silver certification, where applicable for the building type. With the adoption of this policy, the City accepted the nationwide "Architecture 2030 Challenge."

Recent green building projects for the 914 State Street Restrooms and Granada Garage were designed with green features, including natural daylight design, low-water fixtures, water-wise landscaping, sustainable, and recycled materials. The Airline Terminal Improvement Project has been registered with the U.S. Green Building Council and is being designed to be LEED certified.

**Sustainable Santa Barbara Green Builders Packets are available at the planning counter for all private development project applicants.**

### NEXT STEPS

- Implement the Green Building Policy for City Buildings, relating to energy systems and sustainable materials in new construction and existing buildings and incorporating the Architecture 2030 Challenge.
- Ensure LEED training and accreditation for one Building Maintenance employee, one Engineer, one Building Inspector, one Long-Range Planning employee and two Plan Check employees.
- Incorporate energy-savings retrofits in at least 75% of all Home Rehabilitation Loan Program projects.
- Ensure that 100% of Redevelopment Agency (RDA) sponsored capital projects and City or Agency-funded affordable housing projects incorporate green building techniques.

### YOU CAN MAKE A DIFFERENCE

- Incorporate green building features into your next project
- Use passive solar heating and cooling techniques
- Use natural lighting wherever feasible



# Lower Greenhouse Gas Emissions

### What are they?

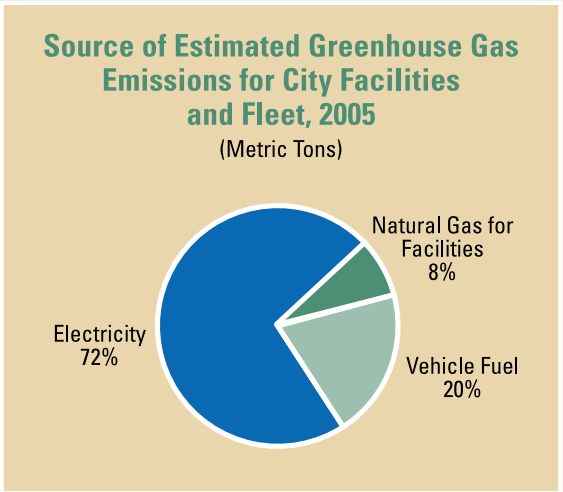
Greenhouse gases are naturally occurring gases that have increased in the Earth's atmosphere, primarily through the release of carbon dioxide due to human influences. The scientific community has observed an increase in greenhouse gases that contribute to an increase in the average temperature of the Earth's atmosphere and oceans, known as global warming or climate change.

### Why are they important?

Reducing the greenhouse gas emissions from the City's facilities and vehicle fleet helps protect the environment from climate change. Emission levels are a key indicator in how the City is reducing its carbon footprint.

### How do we measure our progress?

Greenhouse gas emissions are measured in metric tons of carbon dioxide (CO<sub>2</sub>) emitted. The City's progress will be tracked in how the global warming emissions are reduced. According to the 2005 Greenhouse Gas Inventory, City operations emitted 11,766 metric tons of carbon dioxide. Eighty percent of the City's emissions resulted from the use of electricity and natural gas in City facilities.



### City's Best Practices

The City's fleet and facilities have implemented energy and fuel efficiency projects to curb greenhouse gas emissions, including the use of B20 biodiesel fuel and alternative fuel vehicles. Renewable energy is produced at the El Estero Treatment Plant, covering up to 50% of the Plant's electrical power needs. Additionally, 13 emergency generators are powered by biodiesel.

### RECENT ACHIEVEMENTS

The City completed its first greenhouse gas emissions study that calculated the emissions related to the use of vehicle fuel, electricity, and natural gas. The study is pending final certification. The City is one of the first cities in the nation to complete an emissions study to help track annual emissions from its operations.

### NEXT STEPS

- Certify 2006 greenhouse gas emissions from the City's fleet and facilities, as part of annual effort to track and analyze emissions.
- Conduct employee training to help educate and improve the organization's understanding and role to prevent climate change.
- With the certification of the greenhouse gas emissions study and completion of facility energy audits, develop a 5-year strategy to reduce greenhouse gas emissions.

# Flexible Work Arrangements

### What are they?

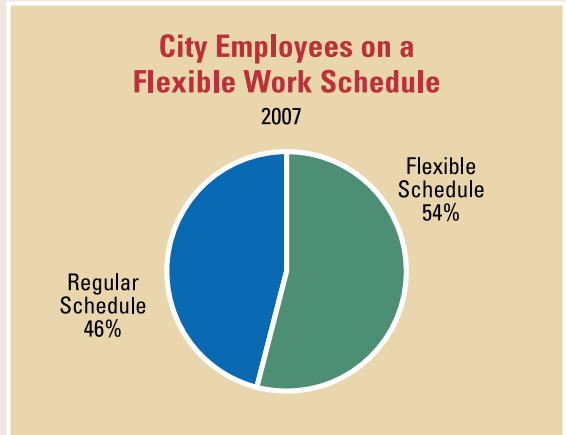
Flexible work arrangements are a transportation demand management (TDM) strategy to encourage a non-traditional work schedule, utilizing telecommuting and a flexible work schedule.

### Why are they important?

Flexible work arrangements reduce vehicle trips and ease traffic congestion that contribute to global warming.

### How do we measure our progress?

The City tracks the work schedules of its full-time, regular employees and also reports on telecommute hours.



### City's Best Practices

The City adopted a Flex Work Policy that provides guidance to employees and managers on how to arrange a flexible schedule. Tools are available to assess whether employees and their positions are suitable for working an alternate schedule or telecommuting. High-tech solutions enable employees to work from home and maintain communication with co-workers.

### RECENT ACHIEVEMENTS

In January 2007, supervisors and managers received their first electronic summary of work schedules for employees they oversee. These reports provide current information on the use of flexible schedules in specific program areas.

Firefighters recently moved to a 48/96 work schedule, reducing their commute frequency by 50%.

### YOU CAN MAKE A DIFFERENCE

- Assess whether a telecommuting arrangement or flexible work schedule will fit your needs, based on the needs of your position and your ability to work effectively from a remote location
- As a manager, help your employees determine whether some work tasks can be completed from a remote location

### NEXT STEPS

- Implement a 9/80 work schedule citywide by closing most City offices and operations on non-payday Fridays with exceptions for offices that provide emergency services or need to maintain minimal staff coverage.
- Achieve a rate of 75% of employees citywide on a flexible work schedule.
- Achieve a 5% rate of employees citywide utilizing telecommuting one or more days per week.

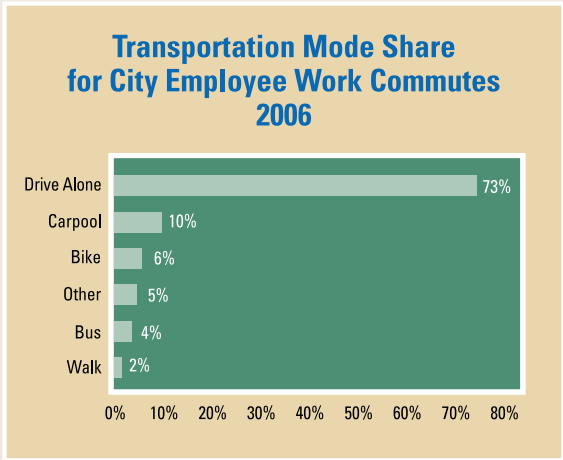


### What is it?

Alternative transportation is the use of transportation modes other than the drive alone transportation mode. Alternative transportation means include bicycling, walking, riding the bus or commuter shuttle, vanpooling, and carpooling.

### Why is this important?

Increased use of alternative transportation can alleviate traffic congestion and reduce harmful vehicle emissions that contribute to global warming.



### NEXT STEPS

- Implement an Employee Ridesharing Program to help employees borrow a City vehicle for their personal transportation needs during the workday.
- Conduct a prize and incentive program for all City employees who commute using alternative transportation.
- Increase annual mileage of City Bicycle Fleet to 2,000 miles.
- Reduce the drive alone transportation mode share to 65% for City employee work commutes.
- Earn an Environmental Protection Agency (EPA) designation as a BEST Workplace for commuters.

### How do we measure our progress?

The City measures its success with an annual survey that asks employees for daily work commute information. Our target is to reduce the drive alone transportation mode among City employees to 65%.

### City's Best Practices

Upon hire, all City employees receive a free MyRide bus pass for use on the Santa Barbara Metropolitan Transit District (MTD) buses to encourage them to ride the bus for their work commute. Employees who use a vanpool or commuter shuttle can pay for these services with pre-tax dollars. Many facilities are equipped with a City bicycle fleet to enable employees to ride a bicycle to run errands between City facilities and in the community. Employees who carpool to work are rewarded with designated parking spaces.

### RECENT ACHIEVEMENTS

All major facilities encourage the employee use of bicycles with safe and convenient bicycle parking. The City offers monthly "Cyclesmart" bicycle safety classes for employees to boost bicycle ridership and educate bicyclists and motorists on vehicle code provisions as they relate to bicycling.

### What is it?

Alternative transportation planning encourages community use of transportation modes other than the drive alone transportation mode, including bicycling, walking, riding the bus or commuter shuttle, vanpooling, and carpooling.

### Why is this important?

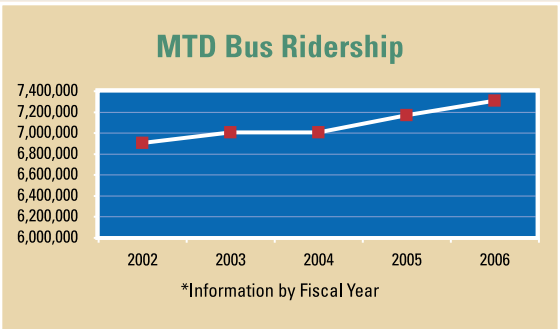
Increased use of alternative transportation can alleviate traffic congestion and reduce harmful vehicle emissions that contribute to global warming.

### How do we measure our progress?

Progress can be measured in this area by the miles of bike lanes and number of new hitching posts that have been made available for bicyclists. MTD ridership is also an indicator of community use of alternative transportation. With 7,305,879 riders in 2006, MTD ridership has grown by 6% since 2002.

### City's Best Practices

Several transportation planning documents provide guidance for improvements to alternative transportation infrastructure. The City adopted a Circulation Element with a goal to achieve equality of choice among all modes of transportation. The Bicycle and Pedestrian Master Plans provide guidance to improve facilities and further promote biking and walking in the City. The City's Urban Design



Guidelines promote designs that make alternative transportation attractive.

The City's 43 miles of bike lanes allow bicyclists many routes to commute to work and reach their destination without an automobile. Approximately 150 bicycle hitching posts have been installed at various locations throughout the City over the past two years for cyclists to safely secure their bicycles.

The City has provided funding to MTD to increase transit service and reduce the wait time between buses.

### RECENT ACHIEVEMENTS

Construction of a bicycle parking station was completed at the Granada Garage, including showers, a restroom, and covered storage for 80 bicycles. Approximately 4,000 linear feet of sidewalk was constructed to complete missing sidewalk links last year.

### NEXT STEPS

- Locate and install 50 bicycle hitching posts in the community.
- Complete the design of the West Downtown Pedestrian Improvement Project, including crosswalk enhancements and curb extensions.
- Complete construction of a traffic calming project and the Safe Routes to School project, connecting the Santa Barbara Junior High School, Santa Barbara High School and the Upper East Side neighborhood.
- Complete construction of pedestrian crossing improvements and a bike path expansion linking Pershing Park with the beachway and Harbor.
- Complete installation of video detection equipment at 14 traffic signals to improve detection of bicyclists for traffic signals.





What is it?

The City’s General Plan and development/ design review process guide the planning and physical development of our community, both public and private. The City encourages resource efficient development that allows our community to continue to “live within our resources.”

Why is this important?

How much development occurs in Santa Barbara, where, what type (housing, commercial, mixed use) and how ‘green’ it is, is determined by various standards and policies.

City’s Best Practices

The City’s General Plan and Charter provisions 1507 and 1508 continue to manage the level of growth and development through

2010. Since 1995, the City has promoted an aggressive program to encourage mixed-use and infill development. The City’s Urban Design Guidelines promote designs that encourage alternative transportation and incorporate green building features. Solar Access Height Limitations were adopted in 1986 for all residential zones, which limit the height of buildings along “northerly” property lines to reduce shading.

RECENT ACHIEVEMENTS

Staff are working with the Planning Commission to appropriately condition development to include green elements such as bioswales, permeable surfaces, tree preservation, limited grading, construction/demolition waste reuse and recycling for many projects.

NEXT STEPS

- Work with the Design Review Boards and the Creeks Division to develop a training seminar for the Boards and public to increase awareness of green building design practices involving soil erosion prevention, soil permeability standards and drainage/runoff issues.
- Initiate Phase II of the General Plan Update by sponsoring community-wide education forums and discussions that incorporate sustainability goals.
- Review LEED Neighborhood Development guidelines for possible inclusion in the General Plan Update.

Many thanks to all who helped in the development of the 2007 Annual Report.

City Council

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*Sustainable Council Committee (Chair)*  
Helene Schneider,  
*Sustainable Council Committee*  
Iya Falcone  
Roger Horton  
Grant House  
Das Williams

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Paul Casey, *Community Development Director*  
Marcelo Lopez, *Administrative Services Director*  
Irene Macias, *Library Director*  
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